

WHAT IS CLAIMED IS:

1. An emergency communication system with an emergency communication system terminal unit provided on a vehicle, comprising:
 - an emergency communication transmission button for starting
 - 5 transmission processing when pressed by a user in an emergency;
 - a gyro sensor for detecting advancing direction of the vehicle;
 - a GPS antenna for receiving signal waves from a plurality of satellites;
 - a GPS receiver for detecting predetermined data respectively
 - 10 from a plurality of signal waves received by said GPS antenna;
 - a position information acquisition unit for generating position information to indicate position of the vehicle based on a signal from the gyro sensor and the GPS receiver;
 - a storage unit for storing various types of data;
 - 15 emergency communication conveying means for transmitting emergency information using a telephone number stored in advance in said storage unit when said emergency communication transmission button is pressed;
 - data output means for outputting data including advancing
 - 20 direction of the vehicle inputted from said gyro sensor and position information generated according to a signal inputted from said GPS receiver to a navigation system connected to external part of the emergency communication system terminal unit; and
 - a control unit for controlling the entire emergency communication
 - 25 system terminal unit.

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2. An emergency communication system according to claim 1,
wherein a position information indicating position and status of the
vehicle as generated according to a data from said gyro sensor and to a
5 signal from said GPS receiver from the data necessary for performing
map matching and possessed by the position information acquisition
unit to said navigation system by said data output means based on
trigger condition such as a request of the navigation system or a timer
in the control unit.

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3. An emergency communication system according to claim 1,
wherein a speed pulse data indicating the present speed of the vehicle
as possessed by said position information acquisition unit is outputted
to said navigation system by the data output means based on trigger
15 condition such as a request of the navigation system or a timer in the
control unit.

4. An emergency communication system according to claim 1,
wherein a reverse data indicating moving status of the vehicle such as
20 forward moving or backward moving and possessed by said position
information acquisition unit is outputted to said navigation system by
the data output means based on trigger condition such as a request of
the navigation system or a timer in the control unit.

25 5. An emergency communication system according to claim 1,

wherein a data of latitude and longitude as possessed by said position information acquisition unit is outputted to said navigation system by said data output means based on trigger condition such as a request of the navigation system or a timer in the control unit.

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6. An emergency communication system according to claim 1, wherein a data necessary for performing map matching and possessed by said position information acquisition unit is outputted to said navigation system by the data output means based on trigger condition such as a request of the navigation system or a timer in the control unit.

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7. A navigation system, connectable to an emergency communication system terminal unit in such manner that signals can be transmitted or received, said emergency communication system terminal unit being installed on a vehicle and comprising a gyro sensor for generating information including advancing direction of the vehicle, a GPS antenna for receiving signal waves from satellites, and a GPS receiver for receiving a desired data from a signal waves received from said received signal waves, whereby said navigation system comprises:

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means for performing map matching based on the information including advancing direction as received from said gyro sensor and the data received by said GPS receiver from said GPS antenna; and control means for indicating the information including position of the vehicle to display means based on the result of said map matching.

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8. A navigation system, electrically connectable to an emergency communication system terminal unit, said terminal unit being installed on a vehicle and comprising a gyro sensor for generating information including advancing direction of the vehicle, and
- 5 said navigation system comprises means for receiving said information generated by said gyro sensor.

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